Some Thoughts on Systems Engineering

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Interim Director
Center for Systems Engineering
mark.wilson@afit.edu

- Some USAF SE Initiatives During the Past Year
- Issues Driving a Continued Need for Disciplined SE and Related Practices
- Continue
- Start

Some USAF SE Initiatives During the Past Year

- Creation & Stand-up of the Center for Systems Engineering in February
  - Case Studies
  - SE PhD, MS & Certificate Programs
  - Short Courses & Orientation Briefings
  - Academic Partnerships (NPS, UNM, NM Tech)
- SE Degree at USAFA
- Policy Memo on Incentivizing SE by SAF/AQ
  - “Place application of SE at the same level as other programmatic considerations such as cost & schedule”
  - Additional guidance to follow

Issues Driving a Continued Need for Disciplined SE and Related Practices

- Deliver Capability to the War Fighter Faster
- Incremental/Spiral Development Strategies
- Net Centric & Capabilities Focus Driving Ever-Increasing System-of-Systems Solutions
  - CJCSI 3170.01 – Joint Capabilities Integration & Development System
  - CJCSM 3170.01 – Operation of Joint Capabilities Integration & Development System
  - CJCSI 6212.01 – Interoperability & Supportability of National Security and IT Systems
  - AFI 63-01 – Operation of Capabilities Based Acquisition Systems
  - AFI 10-601 – Capabilities Based Operational Requirements
- Continued Loss of Experienced Systems Engineers

Continue

- Networking, Brainstorming at Conferences & Symposiums
- Focused Projects at NDIA, INCOSE
  - Value of SE
  - Educational Summit
  - Certification
  - SE Body of Knowledge
- Case Study Development
- Exploration of Ways to Incentivize Good SE

Start

- Preparing More Engineers for Systems Engineering Positions
- Educating Program Managers and Other Key Functionals on the Value and Importance of SE
- Educating Engineers & Program Managers on Principles, Value & Importance of Architecture
  - Critical role in achieving capabilities in war fighting's increasingly net-centric & system-of-systems environment